

WHAT IS CLAIMED IS:

1. A magnetic device, comprising:

2 a magnetic core; and

3 a springable winding, positioned about at least a portion of  
4 said magnetic core, having a terminus biased against said magnetic  
5 core.

2. The magnetic device as recited in Claim 1 wherein said

3 terminus is configured to be interposed between said magnetic core  
and a printed circuit board.

3. The magnetic device as recited in Claim 1 wherein said

2 springable winding comprises a material having a spring constant  
3 ranging from about 750 to about 2000 grams/inch.

4. The magnetic device as recited in Claim 1 wherein said

2 magnetic core comprises an integrally formed pedestal.

5. The magnetic device as recited in Claim 1 wherein said  
2 magnetic core comprises a ferromagnetic material having a  
3 composition selected from the group consisting of:  
4 cobalt-iron,  
5 manganese-zinc,  
6 nickel-iron, and  
7 amorphous nickel-phosphide.

6. The magnetic device as recited in Claim 1 wherein said  
2 springable winding comprises a substantially-planar wire having a  
3 dielectric insulation about said substantially-planar wire.

7. The magnetic device as recited in Claim 1 wherein said  
2 magnetic core and said springable winding are substantially free of  
3 an encapsulant.

8. The magnetic device as recited in Claim 1 wherein said  
2 magnetic device is selected from the group consisting of:  
3 an inductor,  
4 a coupled inductor, and  
5 a transformer.

9. The magnetic device as recited in Claim 1 wherein said  
2 magnetic core comprises first and second core halves.

10. The magnetic device as recited in Claim 1 wherein at  
2 least a portion of said magnetic core has an aspect ratio of at  
3 least 1.6:1.

11. A method of manufacturing a magnetic device, comprising:

2 providing a magnetic core;

3 positioning a springable winding having a terminus about at

4 least a portion of said magnetic core; and

5 biasing said terminus against said magnetic core.

12. The method as recited in Claim 11 further comprising

2 forming said springable winding such that said terminus is

3 interposed between said magnetic core and a printed circuit board.

13. The method as recited in Claim 12 wherein forming

2 includes bending said springable winding about a mandrel.

14. The method as recited in Claim 11 wherein positioning

2 includes positioning a springable winding comprising a material

3 having a spring constant ranging from about 750 to about 2000

4 grams/inch.

15. The method as recited in Claim 11 wherein providing

2 includes providing a magnetic core having an integrally-formed

3 pedestal.

16. The method as recited in Claim 11 wherein providing  
2 includes providing a magnetic core composed of a ferromagnetic  
3 material selected from the group consisting of:

4 cobalt-iron,  
5 manganese-zinc,  
6 nickel-iron, and  
7 amorphous nickel-phosphide.

17. The method as recited in Claim 11 wherein positioning  
2 includes positioning a springable winding formed from a  
3 substantially planar wire having a dielectric insulation.

18. The method as recited in Claim 11 wherein providing and  
2 positioning include providing a magnetic core and positioning a  
3 springable winding wherein said magnetic core and said springable  
4 winding are substantially free of an encapsulant.

19. The method as recited in Claim 11 wherein said  
2 positioning includes positioning a second springable winding about  
3 said magnetic core.

20. The method as recited in Claim 11 wherein providing  
2 includes providing wherein at least a portion of said magnetic core  
3 has an aspect ratio of at least 1.6:1.